APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/522,619	03/10/2000	Peter Post	P00.0364	5081

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EXAMINER
VIG, NARESH

ART UNIT	PAPER NUMBER
3629	

DATE MAILED: 07/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary	Application No. 09/522,619	Applicant(s) POST ET AL.
	Examiner Naresh Vig	Art Unit 3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 March 2000</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1 - 9</u> is/are pending in the application.

    4a) Of the above claim(s) <u>10 - 16</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1 - 9</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4)☒ Interview Summary (PTO-413) Paper No(s). _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: .

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I.   Claims 1- 9, drawn to a method of protecting security module, classified in

class 705, subclass 1.

II.   Claims 10 – 16, drawn to a security module for insertion on a device

motherboard, classified in class 340, subclass 5.2.

Inventions I and II are related as process and apparatus for its practice. The

inventions are distinct if it can be shown that either: (1) the process as claimed can be

practiced by another materially different apparatus or by hand, or (2) the apparatus as

claimed can be used to practice another and materially different process. (MPEP §

806.05(e)). In this case the process of protecting a security module as set forth in

claims 1 – 9 does not require that it protects the specific security module of claims 10 –

16.

Because these inventions are distinct for the reasons given above and have

acquired a separate status in the art as shown by their different classification, restriction

for examination purposes as indicated is proper.

During a telephone conversation with Mr. Steven H. Noll, Registration No.

28,982, on July 22, 2002, a provisional election was made with traverse to prosecute

the invention of claims 1 – 9. Affirmation of this election must be made by applicant in

responding to this office action. Claims 10 – 16 are withdrawn from further consideration

by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 9 are rejected under 35 USC 103(a) as being unpatentable over

French US Patent 5,548,163 in view of Emmett et al. US Patent 6,019,281.

Regarding claim 1, French et al. discloses a security device for use with audio

and video equipment installed in an automobile or other type of vehicle, such as a van

or boat. The security device includes a module which is coupled to the equipment to be

protected. The security device comprises an encoded security key which is plugged into

a key receptacle to disarm and arm the module. The key includes logic for producing an

encoded disarming signal and is of a size which can be easily carried on the person of

the user. The module can be located at a space in the vehicle which is remote to the

key receptacle thereby allowing otherwise inaccessible equipment to be conveniently

secured from the passenger compartment of the vehicle for example. Without a proper encoded key, the equipment cannot be operated and is virtually useless if removed from the vehicle. To provide a further deterrent to theft the module and/or equipment include a warning notice signifying the inoperative nature of the equipment without the key.

The "disarming" process is started by the user inserting the key 24 into the key receptacle 26 for at least 2 seconds. After about 2 seconds, the user removes the key to use the ignition key, and, the user has ten seconds to activate the ignition switch, otherwise, the disarming procedure must be started again. (col. 10, lines 53 – 64)

French does not disclose erasing the security relevant data. Emmett et al. discloses that its Postal Security Device (PSD) may be implemented as a cartridge that can be inserted into and removed from the host system. It simplifies meeting requirement for the PSD enclosure to detect any tampering at the time the tampering occurs and to immediately erase all memory contents that are cryptographically important". (col. 1, line 60 – col. 2, line 10). Therefore, it is known at the time of applicant's invention to a person with ordinary skill in the art to erase security relevant data of the device to disable the device and further limiting its usage.

Regarding claim 2, French discloses that "with the 2-second delay feature described above (in col. 10, lines 42 – 52), operation of the security device 10 is a follows. The "disarming" process is started by the user inserting the key 24 into the key receptacle 26 for at least 2 seconds. The 2-second time constant is determined by the

values for resistor R.sub.5 and capacitor C.sub.1 in the RC network 113. After about 2
seconds, the user removes the key 24 (in order to use the ignition key (not shown)) and
the user has ten seconds to activate the ignition switch 39, otherwise, the disarming
procedure must be started again." (col. 10, lines 53 – 64)

Regarding claim 3, French discloses that its security module includes a power
input port. The power input port is used to provide power to the security module and
includes an input coupled to the constant +12 volt power feed which provides a supply
rail +12 V for powering the circuit elements. The power input port includes an input
which is connected to car ground and provides a reference or ground rail for the security
module (col. 6, lines 22 – 33). French does not disclose having internal battery. Emmett
et al. discloses that when the PSD is connected to a host and is active, the circuitry
preferably powered from the host, and the PSD display circuitry may be powered from
the host or from its own power source. Therefore, it is known at the time of applicant's
invention to a person with ordinary skills in the art to include battery in French to make
the security device self powered for keeping the circuitry alive when there is a power
failure (for example, alarm clocks have alternate battery power to keep the clock
working when there is a power failure).

French does not disclose monitoring battery. Emmett et al. discloses that PSDs
may be implemented as a cartridge that can be inserted into and removed from the host

system. Emmett et al. PSD enclosure meets requirements to detect any tampering at the time the tampering occurs and to immediately erase all memory contents that are cryptographically important. "This almost certainly implies using long lived battery-powered detection and erasing circuits, including a `self destruct` mode for when battery failure is near." (col. 1, line 60 – col.2, line 10). Therefore, it is known at the time of applicant's invention to a person with ordinary skills in the art to monitor battery status to determine time to replace the battery, and also to detect why the circuitry is not working (for example, LapTop computers are known to monitor status of the battery to determine when to automatically put the system in hybernation mode. (just keeping the memory alive) to protect user's recent work).

Regarding claims 4 and 5, neither French nor Emmett et al. disclose inhibiting the security module when there is damage to the security module. Gerst discloses a taximeter with logic circuitry that provides passenger detection, distance measuring, clock timing, speed referencing, tamper and fault detectors, manual pushbutton controls, settable constants for distance, time and money, and an emergency power supply. Logic circuitry is interconnected to provide a taximeter that accurately computes and displays taxi fares, adds extras charges manually or automatically, displays extras charged on the meter face, detects tampering and circuit faults automatically, displays a tamper number on the meter fare display that indicates the specific tamper or fault, displays meter operation on the taxi toplight, including tampering, disables the taximeter from operation in the event of a tamper or fault, can be reset to normal operation only by

an external coded reset device, counts and displays taxi driveshaft rotations on the fare

display under the command of an external calibration device, and provides positive

notice to the taxi owner in the event of any tampering to the taximeter system (abstract).

Whenever the meter is disabled because of a fault or tamper, it becomes necessary to

perform a code match reset to restore normal meter operations. If a driver were to

tamper with the meter in an attempt to disable its automatic operations, the meter would

lock up in the tampered state. The driver would be forced to return to his company in the

tampered state which would be detected immediately by the management. (col. 10,

lines 15 – 60). Therefore, it is known at the time of applicant's invention to a person with

ordinary skills in the art to inhibit the security module when there is damage to the

security module to prevent losses by the use of damaged device.

        Regarding claims 6 – 9, neither French nor Emmett et al. disclose

communicating status before the expiration of pre-determined time. However, it is

notoriously known at the time of applicant's invention to a person with ordinary skills in

the art that computer networks like SDLC protocol in IBM SNA architecture, remote

devices (PU2, PU2.1) provide status to controller (PU4). In the event when the

controller does not receive response from the remote devices after pre-determined time

(time interval between each poll, claim 8) and tries (number of times to poll the remote

device before it is put on inactive state, claim 9), the controller puts the remote device in

an inactive state. Remote device is put in an inactive state. When the controller receives

valid response from the remote host, remote device is put in active state (restoring

normal operation). Therefore, it would have been obvious to a person with ordinary

skills in the art to commumicate status to the remote within pre-determined time to

monitor remote devices from a central location.
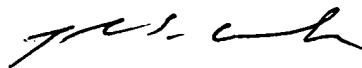
Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

1. Gerst, US Patent 4,217,484.

2. Information on SNA and LU6.2 Connectivity (for SDLC protocol).

3. Information on batteries used in computers.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Naresh Vig whose telephone number is 703.305.3372.

The examiner can normally be reached on M-F 7:30 - 5:00 (Alt Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Weiss can be reached on 703.308.2702. The fax phone numbers for

the organization where this application or proceeding is assigned are 703.305.7687 for

regular communications and 703.305.7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is

703.305.3900.

JOHN G. WEISS
SUPERVISORY PATENT EXAMINER
***   **TECHNOLOGY CENTER 3600**

July 29, 2002